



New York - New Jersey
Harbor & Estuary Program
www.harborestuary.org

RESTORATION WORK GROUP

of the New York – New Jersey Harbor & Estuary Program

Chair: Lisa Baron (Army Corps of Engineers)

www.HarborEstuary.org

Meeting, July 26, 2017

17 Battery Place

Suite 915

10:00 – 1:30

- I. **Welcome and minutes from last meeting:** minutes from last meeting were approved and can be found on the HEP website. All minutes going forward will have a section where we track our progress towards the Action Agenda goals.

II. **Introductions and Updates (attendance at the end of this document):**

USACE

- NJDEP is moving forward with Liberty State Park project in partnership with the USACE through the Interagency and International Services (IIS) Program- ~234 acres of habitat restoration.
- Spring Creek North Draft Feasibility Report and Environmental Assessment will be released for public review end of August. Spring Creek South Coastal Resilience and Ecosystem Restoration Project is progressing through design preparation.

USEPA

- EPA withdrew the Clean Water Rule – it is a setback, but 99% of U.S. waterways will still be protected.

NJDEP

- Weston Mill Dam (millstone river NJ) will be removed for fish passage the second week in August.

NYSDEC

- Staten Island mitigation bank was issued a permit. However, issues have arisen during negotiations with USFWS regarding monitoring requirements. USFWS is concerned about the potential for recontamination (attractive nuisance issue) and is requesting an additional \$7 million worth of post construction monitoring/studies. Negotiations are in progress.
- Based on the continued discussion on the attractive nuisance issue, the RWG decided to extend membership to the USFWS (possibly the NY branch) and to start the planning process of a meeting with USFWS to delve into this topic. Lisa Baron will reach out to Steve Mars and Clay Stern at USFWS.

Judy Weis, Rutgers

- Has been asked to join the recently reinstated Waterfront Management Advisory Board. She asked the group if restorations were taking Sea Level Rise into account.
- Rick Winfield noted that it would be good to have a cross agency consensus on design life.

HEP

- The comment period for the Draft Action Agenda has closed but HEP will still take informal comments if you have them.
- HEP is conducting a benthic community study within the pile fields of the Hudson River Estuarine Sanctuary. The goal is to determine if the benthic community in the pile fields is different from that of the inter-pier area in order to tell us something about the habitat value of the piling fields. Gary Taghon from Rutgers will be the Principal Investigator. Contact Isabelle for more information or to provide comments on this project.

NYC Parks

- **Design and Construction:**
 - Bridge Park - design of living shoreline pilot section and applying for grant for construction;
 - Fish Passage - stocked 400 alewife from Brides Brook CT; found >7 river herring – alewife - recorded in the fish video using the fish ladder;
 - Alley Creek pools - completed and planted pilot in-filling expanding pans with clean sand;
 - Alley Creek living shoreline - 30% design;
 - Sunset Cove - bids high, seeking \$7M in added funding;
 - Idlewild sediment application – design;
 - Snug Harbor - concept design;
 - Saw Mill MARSHEs; and
 - Tottenville Breakwater - 30% design – Parks helping with review.
- **Condition Assessment and Restoration Opportunities:**
 - Watershed plan development - Harlem & North Shore;
 - Stream - stream assessment complete ~10 miles of new stream mapped and assessed and freshwater wetlands mapping (2018)
- **Acquisition:**
 - Sarnelli property transferred to City Trust. Located along Saw Mill Creek at Chelsea Road in Staten Island; requires extensive restoration.

Hudson River Foundation

- Working on the oyster restoration project in Jamaica Bay – they will be monitoring spat collectors to see if there is any settlement from the donor reef in Thurston Basin.
- Planning a 6 acre oyster mitigation project at the Tappan Zee.

NOAA (updates from spring 2017 meeting)

- Third major case settlement with Insurance Companies in December 2016. Trustees Council is beginning the restoration phase of the case.

- Will be soliciting restoration ideas for the Raritan River Watershed from the public in 2017.

NYCDEP (updates from spring 2017 meeting):

- NYCDEP will be installing Phase II of the Newtown Creek wetland projects. The first is an expansion of the 2015 wetland installed in Dutch Kills and the second is a new installation at the Hunters Point Bridge in Dutch Kills.
- NYCDEP is also preparing final plans and specifications for a 1-acre wetland restoration project at Alley Creek.

Port Authority (updates from spring 2017 meeting

- Construction at the Westchester Creek site (near the YMCA in Castle Hill) will begin soon and continue through spring/summer 2018.
- Planning for mitigation at the Pugsley Creek site, across the creek from Castle Hill Park, is ongoing.

III. Hudson-Raritan Estuary Feasibility Report Follow ups: Lisa Baron gave us an update on the next steps on the Feasibility Report and how the NY District is addressing all the comments received by HQUSACE, Agency Technical Review and North Atlantic Division.

- The District needs to do more analysis on the 33 restoration sites to confirm that the recommendation for each site is the tentatively selected plan, as well as confirm that all sites within each Planning Region and HRE-wide should be recommended for construction. A list of upcoming tasks that are needed prior to the Agency Decision Milestone were presented (attached) including:
 - Cost Effectiveness/Incremental Cost Analysis (CE/ICA) for sites with like habitat (i.e., wetlands, oysters, tributary connections) within Planning Regions and HRE-wide;
 - Additional field work at freshwater sites (Bronx River and Branch Brook Park in Lower Passaic) to capture ecological benefits using Habitat Suitability Index models. Lisa will send around a description of the tools they plan to use to evaluate the sites; and
 - Concept designs may be refined for some sites based on comments.
- The District will be finishing the revised Volume 2 of the CRP that details the more technical information about each TEC. Lisa may be reaching out to RWG members for updates.

IV. Fish Habitat Research Update: Tom Grothues from Rutgers University gave us a presentation on his recent research entitled: Influence of modified shorelines on fish distribution and abundance: A synthesis of efforts in the New York Harbor. The following is their summary of the synthesis findings:

- Most benthic (bottom) fish are less abundant or absent under piers
- Exceptions are night-time olfactory feeders (i.e. eels)
- Most benthic fish shrink or die when kept under piers
- The same species grow if kept in open water, or grow slowly if kept at pier edges

- This pattern does not hold for un-shaded (relict) pier structures
- Failure to feed drives the difference among treatments
- Small pelagic (water column) prey fish avoid shaded areas
- Social behavior (school fidelity) can partially override this response
- Large pelagic predatory fish utilize shaded edges, but avoid deep shade
- Because of the ratio of edge to deep shade, pier size matters to both large and small fish
- The context of the shading relative to its environment matters.
- Slope matters, Depth matters, Edge matters, Current matters, Connection matters
- The New York Harbor is accessible to a rich variety of fishes, and representatives occur in patch habitats similar to representation in nearby natural estuaries

Some summarized questions from the workgroup members and answers from Tom:

- Does the height of the structure on top of piers matter? **Not height per se but light penetration does.**
- What is the take home management implication of your study? **More to come with our final report but in general we need more gradually sloping shallow shorelines.**
- Do barges matter? **We need to do more research on barges but it likely depends on where you put them. If the shoreline is bulk-headed and the water is already deep and fast moving – the barge probably has little impact on fish habitat.**

Final thoughts: the upcoming challenge is to scale these stressors relative to impact. “A spot of shade or dappled shade could conceivably even have a positive effect; we simply haven’t been able to address the issue of response relative to scale (size and spacing) of features well enough, but our experience suggests it will not be linear.” As a next step they will build a GIS tool for the Harbor that builds on this synthesis of information that can be queried.

- V. Discussion on Shorelines and Shallows workshop:** Isabelle Stinnette asked the group if given what we have just heard from Tom Grothues – do we still want to have a Shorelines and Shallows Workshop to discuss how to make progress on this Target Ecosystem Characteristic. The group agreed that it was still a good idea and Tom supported the idea of holding this workshop. Rob Pirani suggested that perhaps the workshop could be a place where we could query the GIS tool that Tom is building to try to answer some of our research questions.

Action Items

- Isabelle will start planning a workshop for the fall. Members should look for an upcoming email to solicit help with the planning, invitee list and draft list of research questions regarding shorelines and shallows habitat. Restoration Work Group members should reach out to Isabelle if they would like to help in the planning.

- VI. Habitat Environmental Indicators:** Isabelle passed around worksheets listing potential habitat environmental indicators for the upcoming State of the Estuary and Environmental

Monitoring Plan reports. Potential sources for the data were also listed. Thanks to all the members for the input.

VII. Hudson River Feasibility Study: Lisa Baron updated the RWG on the Feasibility Study for the Hudson River Comprehensive Restoration Plan sites. The NY District and NYSDEC have selected 22 sites from an original list of 1,995 restoration opportunities in the Hudson River watershed that will be further evaluated as 13 project sites (several original sites were combined due to proximity and connectivity). Site selection was influenced by screening criteria including presence of contamination, real estate and complexity and sites were prioritized that were linked to past USACE actions and impacts (i.e. navigational dredging). Next steps include reconnaissance of the 13 sites, screening to prioritize a smaller number of sites to move forward for more detailed feasibility level activity (including engineering designs, environmental assessments and cost effective analysis). USACE is taking the lessons learned from the HRE Feasibility Study and applying it to this project.

VIII. Other updates/ Upcoming Events

- The RWG is hoping to add a co-chair position to join Lisa Baron. Contact Lisa or Isabelle if you are interested in the position.
- The RWG is going to reach out to the NJ Sports and Exhibition Authority and the US Fish and Wildlife Service to see if they would like to join the membership of the group.
- The CRP Restoration Activity Map is up and running.
<http://www.urbanresearchmaps.org/crp/> Isabelle hopes to make a batch of corrections to the opportunities sites soon. Contact her if there is a particular site that you would like to have the information corrected sooner rather than later.
- HEP's Citizen Advisory Council is starting citizen science venture and you can join the planning committee if you wish. They will first be sending out a survey asking organizations and agencies to describe the citizen science that they are doing. Following that, a citizen science conference will be planned for this winter.
- A group at Rutgers is looking for a riparian restoration opportunity in the Raritan or Two Rivers area of NJ. Please contact Isabelle with any leads.
- We need to schedule a HEP oyster subcommittee meeting – Jim Lodge will schedule. The need for this meeting is also important due to the HRE Feasibility Study preparation of 2 new alternatives at each of the 5 oyster restoration sites.

Attendees:

Lisa Baron (Chair), US Army Corps of Engineers
Tom Grothues, Rutgers University (guest speaker)
Ariane Giudicelli, NY-NJ Harbor & Estuary Program
Grace Jacob, New Jersey Department of Environmental Protection
TJ Johnson (guest)
Marit Larson, NYC Department of Parks and Recreation
Jim Lodge, Hudson River Foundation

Debbie Mans, New York / New Jersey Baykeeper
 Daniel Montella, Environmental Protection Agency
 Sam Oliver (guest)
 Robert Pirani, NY-NJ Harbor & Estuary Program
 Ken Scarlatelli, NYS Department of Environmental Conservation
 Isabelle Stinnette, NY-NJ Harbor & Estuary Program
 Dennis Suszkowski, Hudson River Foundation
 Judith Weis, Rutgers University
 Rick Winfield, Environmental Protection Agency

ACTION AGENDA TRACKING REPORT

Action ID	Action	Start Date	Complete, In-process, Planned	Responsible party
H-A-1	Increase investment in conservation and restoration projects.	01/01/18		
H-A-2	Evaluate ways to reduce costs of restoration.	10/01/17		
			Create a hub for recruiting restoration volunteers/citizen scientists – HEP CAC is proceeding towards this project	RWG + CAC
H-A-3	Document value of ecosystem services delivered through restoration for decision makers.	04/03/17		
			HEP and the Hudson River Foundation hosted a small workshop (7/27/17) with environmental economists from Resources for the Future to discuss Ecosystem service evaluation in the NY-NJ Harbor region	HEP + HRF
H-A-4	Create a decision making tool for prioritization of restoration opportunities.	07/05/17		
			Have a discussion with the RWG on what we would like to see for a prioritization tool	RWG
H-B-1	Share research and best practices among partners.	04/03/17		
			Restoration Work Group meeting 3/29/17	RWG
			2016 Restoration Progress Report	ILS
			Create State of the Estuary Report	ILS
			State of the Estuary Conference 5/23/17	ILS
			Update CRP tracking website	ILS

			Restoration Work Group meeting 7/26/17	RWG
			RWG assists HEP with gathering restoration, acquisition and leveraging data for NEPORT (EPA reporting)	
			HEP CAC is planning to have a citizen science conference early 2018	
H-B-2	Assess and interpret shoreline and shallow-water habitat condition and value.	04/03/17		
			Plan a shorelines and shallows TEC workshop	RWG
H-B-3	Understand the risks of recontamination of restored sites.	06/01/18		
			Have a discussion with the RWG on next steps for this issue.	RWG
			Inviting US Fish and Wildlife Service to be a part of the RWG	RWG
H-C-1	Increase support for monitoring and consistency among metrics.	04/03/17		
			HEP is participating in a project lead by the SRIJB to discuss monitoring of NNBFs	
H-C-2	Synthesize existing monitoring data to better understand and communicate trends.	01/01/18		
H-D-1	Incorporate sea level rise into restoration and management practices.	12/30/17		
			Look at HRE Feas. Study assessment of CRP sites	ILS
H-D-2	Advance conservation and restoration planning for properties eligible or already acquired through flood plain/buyout programs.	10/03/17		
			Have States come into RWG meeting to discuss plans/status	RWG